## **ABSTRACT**

A cache memory preprocessor prepares a cache memory for use by a processor. The processor accesses a main memory via a cache memory, which serves a data cache for the main memory. The cache memory preprocessor consists of a command inputter, which receives a multiple-way cache memory processing command from the processor, and a command implementer. The command implementer performs background processing upon multiple ways of the cache memory in order to implement the cache memory processing command received by the command inputter.